

應用階層線性模式於顧客滿意度之研究

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摘要

影響顧客滿意度的因素有很多，且構成顧客滿意度的資料結構會因產業、地區、公司規模等型態而具有巢狀結構或擁有層級的特性。過去在分析顧客滿意度資料過程中，通常沒有將背景不同的客戶、使用不同性質產品的客戶分為數個異質性單位，而將背景不同的客戶、在不同區域購買的客戶或購買不同產品的客戶視為一個同質的群體，因此可能會產生變異合計偏差的問題，其分析結果往往無法真正表示顧客滿意度的意涵。本研究運用階層線性模式來分析擁有層級的特性的顧客滿意度資料，以釐清上述問題，分析個案是以某機械公司的顧客滿意度年度調查資料，探討顧客滿意度與相關變數之關聯性，探討顧客滿意度是否會因階層不同而有差異性存在，並探討其變異原因是否與客戶再購買經驗有關。以期了解在不同的地區、不同的產業、不同的公司規模等情形下，其對顧客滿意度與相關變數之階層結構關聯性。最後，本研究藉由實例及HLM三種手法來分析，提供業者一個參考依據。

關鍵詞：顧客滿意度；階層線性模式

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參考文獻

- [1] 高新建與吳幼吾(1997)，「線性模式在內屬結構教育資料上的應用」，教育研究資訊，第5卷第2期，頁31-50。
- [2] 陳正昌、程炳林、陳新豐與劉子鍵(2003)，「多變量分析方法:統計軟體應用」，五南出版社，頁423-452。
- [3] 賴富山(1993)，「遊客遊憩因子之研究 階層線性模式之運用」，私立朝陽科技大學企業管理研究所碩士論文。
- [4] Anderson, Eugene W. and Sullivan Mary W. (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms," Marketing Science, Vol.16, No.2, pp.129-145.
- [5] Anderson, Eugene W., Fornell, Claes, and Lehmann Donald R. (1994), "Customer Satisfaction, Market Share, and Profitability: Findings from Sweden," Journal of Marketing, Vol.58, No.3, pp.53-66.
- [6] Anderson, Eugene W., Fornell, Claes, and Rust Roland T. (1997), "Customer Satisfaction, Productivity, and Profitability: Differences between Goods and Services," Marketing Science, Vol.16, No.2, pp.129-45.
- [7] Anderson, Eugene W. and Mittal Vikas (2000), "Strengthening the Satisfaction- Profit Chain," Journal of Service Research, Vol.3, No.2, pp.107-20.
- [8] Bolton, Ruth N. (1998), "A Dynamic Model of the Duration of Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction," Marketing Science, Vol.17, No.1, pp.45-65.
- [9] Burstein, L. (1980). "The analysis of multilevel data in educational research and evaluation," Review of Research in Education, Vol.8, pp.158-233.
- [10] Bryk, Anthony S. and Raudenbush Stephen W. (1992), Hierarchical Linear Models. Newbury Park, CA: Sage.
- [11] Cardozo, R. N., (1965) "An experimental study of customer effort, expectation and satisfaction," Journal of Marketing Research, Vol.1, No.2, pp.244-249.
- [12] Cronin, J. J. & Taylor S. A (1992), "Measuring Service Quality: Reexamination and Extension," Journal of Marketing, Vol.56, pp.55-68.
- [13] De Leeuw, J. (1992). "Serious editors' introduction to hierarchical linear models," In Bryk A. S. & Raudenbush S. W., Hierarchical Linear Models(pp.xiii-xvii). Newbury Park, CA: Sage.

- [14] Drucker, Peter F. (1954), *The Practice of Management*. New York: Harper & Row.
- [15] Finn, J. D. (1993). *School engagement & student at risk*. Washington, DC: NCES.
- [16] Fornell, Claes (1992), "A National Customer Satisfaction Barometer: The Swedish Experience," *Journal of Marketing*, Vol.56, NO.1, pp.6-21.
- [17] Fornell, Claes, Johnson Michael D., Anderson, Eugene W., Jaesung Cha, and Bryant Barbara Everitt (1996), "The American Customer Satisfaction Index: Nature, Purpose, and Findings," *Journal of Marketing*, Vol.60, No.4, pp.7-18.
- [18] Garbarino, Ellen and Johnson Mark S. (1999), "The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships," *Journal of Marketing*, Vol.63, No.2, pp.70-87.
- [19] Guieford, J. P. (1965), *Fundamental Statistics in Psychology and Education*, 4th ed., N. Y.:McGraw-Hill.
- [20] Malthouse, Edward C., Oakley James L., Calder Bobby J., and Dawn Iacobucci (2004), "Customer Satisfaction Across Organization Units" *Journal of Service Research*, Vol.6, No.3, pp.231-242.
- [21] Oliver Richard L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," *Journal of Marketing Research*, Vol.17, No.11, pp.460-469.
- [22] Oliver, Richard L. (1993), "Cognitive, Affective, and Attribute Bases of the Satisfaction Response," *Journal of Consumer Research*, Vol.20, No.3, pp.418-30.
- [23] Parasuraman, A., Zeithaml V. A. and Berry L. L. (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, Vol.64, No.1, pp.12-40.
- [24] Reichheld, Frederick (1996), *The Loyalty Effect*. Cambridge, MA: Harvard Business School Press.
- [25] Srivastava, Rajendra K., Shervani Tasadduq A., and Fahey Liam (1998), "Market-Based Assets and Shareholder Value: A Framework for Analysis," *Journal of Marketing*, Vol.62, No.1, pp.2-18.
- [26] Summer, A. A., Wolfe B. L. (1997) "Do schools make a difference," *The American Economic Review*, Vol.67, No.4, pp.639-652.
- [27] Zeithaml, Valarie A., Berry Leonard L., and Parasuraman, A., (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, Vol.60, No.2, pp.31-46.